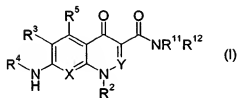


## AMENDMENTS TO THE CLAIMS

**This listing of claims will replace all prior versions and listings of claims in the application:**

### **LISTING OF CLAIMS:**

1. (currently amended): A platelet aggregation inhibitor comprising a quinolone derivative represented by the formula (I) or a pharmaceutically acceptable salt thereof as an active ingredient:



[the symbols in the formula have the following meanings:

X: C-R<sup>7</sup> or N;

Y: C-R<sup>6</sup> or N;

R<sup>11</sup>: -H, a lower alkyl which may be substituted, or an amino which may be substituted with a lower alkyl which may be substituted;

R<sup>12</sup>: -H, or a lower alkyl or an aryl which respectively may be substituted, provided that R<sup>11</sup> and R<sup>12</sup> together with the adjacent nitrogen may form a cyclic amino which may be substituted;

R<sup>2</sup>: a lower alkyl or, a cycloalkyl, an aryl or a hetero ring, which respectively may be substituted;

R<sup>3</sup>: a halogen, a lower alkyl or O-lower alkyl;

R<sup>4</sup>: a cycloalkyl or a non-aromatic hetero ring, which respectively may be substituted, or a lower alkyl substituted with a cycloalkyl; provided that when R<sup>4</sup> represents a non-aromatic hetero ring which may be substituted, a carbon atom constituting the ring binds to the adjacent NH;

R<sup>5</sup>: -H, a halogen, cyano, nitro, a lower alkyl, a halogeno-lower alkyl, a cycloalkyl, an aryl, a hetero ring, O-lower alkyl, -OH, -NHCO-lower alkyl, -N(lower alkyl)CO-lower alkyl, an amino which may be substituted with a lower alkyl, or a cyclic amino which may be substituted;

$R^6$ : -H, a halogen, a lower alkyl or a halogeno-lower alkyl;  
 $R^7$ : -H, a halogen, a lower alkyl or a halogeno-(lower-alkyl);  
provided that when Y represents C- $R^6$ ,  $R^3$  and  $R^6$  together may form a lower alkylene or a lower alkenylene.

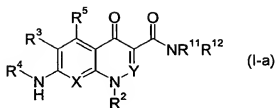
2. (original): A P2Y<sub>12</sub> inhibitor comprising the compound according to claim 1 as an active ingredient.

3. (withdrawn): A method for inhibiting platelet aggregation in an individual, comprising administering a therapeutically effective amount of the compound of claim 1, and at least one pharmaceutically acceptable carrier, to the individual.

4. (withdrawn): A method for inhibiting P2Y<sub>12</sub> in an individual, comprising administering a therapeutically effective amount of the compound of claim 1, and at least one pharmaceutically acceptable carrier, to the individual.

5 - 6. (canceled).

7. (currently amended): A quinolone derivative represented by the formula (I-a) or a pharmaceutically acceptable salt thereof:



[the symbols in the formula have the following meanings:

X: C- $R^7$  or N;

Y: C- $R^6$  or N;

R<sup>11</sup>: -H, a lower alkyl which may be substituted, or an amino which may be substituted with a lower alkyl which may be substituted;  
R<sup>12</sup>: -H, or a lower alkyl or an aryl, which respectively may be substituted, provided that R<sup>11</sup> and R<sup>12</sup> together with the adjacent nitrogen may form a cyclic amino which may be substituted;  
R<sup>2</sup>: a lower alkyl, or a cycloalkyl, an aryl or a hetero ring, which respectively may be substituted;  
R<sup>3</sup>: a halogen, a lower alkyl or O-lower alkyl;  
R<sup>4</sup>: a cycloalkyl or a non-aromatic hetero ring, which respectively may be substituted, or a lower alkyl substituted with a cycloalkyl; provided that wherein R<sup>4</sup> represents a non-aromatic hetero ring which may be substituted, a carbon atom constituting the ring binds to the adjacent NH;  
R<sup>5</sup>: -H, a halogen, cyano, nitro, a lower alkyl, a halogeno-lower alkyl, a cycloalkyl, an aryl, a hetero ring, O-lower alkyl, OH, NHCO-lower alkyl, N(lower alkyl)CO-lower alkyl, an amino which may be substituted with a lower alkyl, or a cyclic amino which may be substituted;  
R<sup>6</sup>: -H, a halogen, a lower alkyl or a halogeno-lower alkyl;  
R<sup>7</sup>: -H, a halogen, a lower alkyl or a halogeno-lower alkyl;  
~~provided that when Y represents C-R<sup>6</sup>, R<sup>2</sup> and R<sup>6</sup> together may form a lower alkylene or a lower alkenylene and provided that 7 (cyclohexylamino) 1 ethyl 6 fluoro 4 oxo 1,4 dihydroquinoline-3-carbohydrazide is excluded.~~

8. (original): The compound according to claim 7, wherein X is CH.

9.-11. (canceled).

12. (currently amended): The compound according to ~~claim 11~~claim 8, wherein R<sup>12</sup> is a lower alkyl substituted with one or more substituent groups selected from Group Q, wherein at least one of the substituent groups is selected from Group P:

Group P: -CO<sub>2</sub>H, -SO<sub>3</sub>H, -P(O)(OH)<sub>2</sub>, and -OP(O)(OH)<sub>2</sub>; and

Group Q: -F, -OH, -CO<sub>2</sub>H, -SO<sub>3</sub>H, -P(O)(OH)<sub>2</sub>, and -OP(O)(OH)<sub>2</sub>

13. (canceled).

14. (currently amended): The compound according to claim 7, which is  
[2-({[7-(cyclohexylamino)-1-cyclopentyl-6-fluoro-4-oxo-1,4-dihydroquinolin-3-yl]carbonyl}  
amino)ethyl]phosphonic acid;  
(2S)-2-({[7-(cyclohexylamino)-1-cyclopentyl-6-fluoro-4-oxo-1,4-dihydroquinolin-3-  
yl]carbonyl} amino)butanedioic acid,  
~~2-({[7-(cyclohexylamino)-1-cyclopentyl-6-fluoro-4-oxo-1,4-dihydroquinolin-3-  
yl]carbonyl} amino)ethyl dihydrogen phosphate;~~  
(2S)-2-({[7-(cyclohexylamino)-1-cyclopentyl-6-fluoro-4-oxo-1,4-dihydroquinolin-3-  
yl]carbonyl} amino)pentanedioic acid,  
~~\_2-2-({[7-(cyclohexylamino)-6-fluoro-4-oxo-1-[(3S)-tetrahydrofuran-3-yl]-1,4-dihydroquinolin-  
3  
yl]carbonyl} amino)ethyl]phosphonic acid;  
[2-({[7-(cyclohexylamino)-6-fluoro-4-oxo-1-[(3R)-tetrahydrofuran-3-yl]-1,4-dihydroquinolin-3-  
yl]carbonyl} amino)ethyl]phosphonic acid;  
[2-({[7-(cyclohexylamino)-1-(1-ethylpropyl)-6-fluoro-4-oxo-1,4-dihydroquinolin-3-  
yl]carbonyl} amino)-1,1-difluoroethyl]phosphonic acid;  
[2-({[7-(cyclohexylamino)-6-fluoro-1-[2-hydroxy-1-(hydroxymethyl)ethyl]-4-oxo-  
1,4-dihydroquinolin-3-yl]carbonyl} amino)ethyl]phosphonic acid;  
[2-({[7-(cyclohexylamino)-1-ethyl-6-fluoro-4-oxo-1,4-dihydrocinnolin-3-yl]carbonyl}  
amino)ethyl]phosphonic acid;  
[2-({[7-(cyclohexylamino)-1-(1-ethylpropyl)-6-fluoro-4-oxo-1,4-dihydrocinnolin-3-  
yl]carbonyl} amino)ethyl]phosphonic acid;  
[2-({[7-(cyclohexylamino)-1-(1-ethylpropyl)-6-fluoro-4-oxo-1,4-dihydroquinolin-3-  
yl]carbonyl} amino)ethyl]phosphonic acid;  
(2S)-2-({[7-(cyclohexylamino)-1-(1-ethylpropyl)-6-fluoro-4-oxo-1,4-dihydroquinolin-3-  
yl]carbonyl} amino)pentanedioic acid or;  
(2S)-2-({[7-(cyclohexylamino)-1-(1-ethylpropyl)-6-fluoro-4-oxo-1,4-dihydrocinnolin-3-  
yl]carbonyl} amino)pentanedioic acid ~~or~~~~

[2-({ [7-(cyclohexylamino)-1-(2,2-dimethyl-1,3-dioxan-5-yl)-6-fluoro-4-oxo-1,4-dihydroquinolin-3-yl]carbonyl}amino)ethyl]phosphonic acid, or a pharmaceutically acceptable salt thereof.

15. (currently amended): A pharmaceutical composition comprising a compound according to any one of claims 7, 8, 12 or through 14 and a pharmaceutically acceptable carrier.

16. (original): The pharmaceutical composition according to claim 15, which is a platelet aggregation inhibitor.

17. (original): The pharmaceutical composition according to claim 15, which is a P2Y12 inhibitor.

18. (withdrawn - currently amended): A method for inhibiting platelet aggregation in an individual, comprising administering a therapeutically effective amount of the compound of any one of claims 7, 8, 12 or through 14, and at least one pharmaceutically acceptable carrier, to the individual.

19. (withdrawn - currently amended): A method for inhibiting P2Y12 in an individual, comprising administering a therapeutically effective amount of the compound of any one of claims 7, 8, 12 or through 14, and at least one pharmaceutically acceptable carrier, to the individual.

20 - 21. (canceled).

22. (new): The compound according to claim 7, which is  
[2-({ [7-(cyclohexylamino)-1-cyclopentyl-6-fluoro-4-oxo-1,4-dihydroquinolin-3-yl]carbonyl}amino)ethyl]phosphonic acid,

2-({[7-(cyclohexylamino)-1-cyclopentyl-6-fluoro-4-oxo-1,4-dihydroquinolin-3-yl]carbonyl} amino)ethyl dihydrogen phosphate,  
[2-({[7-(cyclohexylamino)-1-(1-ethylpropyl)-6-fluoro-4-oxo-1,4-dihydroquinolin-3-yl]carbonyl} amino)-1,1-difluoroethyl]phosphonic acid,  
[2-({[7-(cyclohexylamino)-1-ethyl-6-fluoro-4-oxo-1,4-dihydrocinnolin-3-yl]carbonyl} amino)ethyl]phosphonic acid,  
[2-( { [7-(cyclohexylamino)-1-(1-ethylpropyl)-6-fluoro-4-oxo-1,4-dihydrocinnolin-3-yl]carbonyl} amino)ethyl]phosphonic acid, or  
[2-( { [7-(cyclohexylamino)-1-(1-ethylpropyl)-6-fluoro-4-oxo-1,4-dihydroquinolin-3-yl]carbonyl} amino)ethyl]phosphonic acid,  
or a pharmaceutically acceptable salt thereof.